ANALYST:		VPDES NO.	

Instrument:

Parameter: Total Residual Chlorine (TRC)
Method: Chlorine Electrode
1/08

METHOD OF ANALYSIS:

☐ Orion Research Instruction Manual

		Y	N
1)	Is the electrode an Orion Model 97-70? [Mfr.]		
2)	Is distilled water prepared from an alkaline potassium permanganate solution? [Mfr.]		
3)	Is electrode slope measured correctly? [Mfr.]		
4)	Is slope between 26 and 30 mV per 10 mg/L? [Mfr.]		
5)	Is 1 ppm standardizing solution prepared fresh daily? [Mfr.]		
6)	Is the 1 mL residual chlorine standard, 1 mL iodide reagent, and 1 mL acid reagent mixed thoroughly and allowed to stand for 2 minutes before dilution to volume? [Mfr.]		
7)	Is 99 mL distilled water added and mixed thoroughly? [Mfr.]		
8)	Is meter calibrated to 1 ppm reading (0.00 mV) with the standardizing solution for each test? [Mfr.]		
9)	Is the 100 mL of sample, 1 mL of iodide reagent, and 1 mL of acid reagent allowed to stand for at least two minutes prior to measurement? [Mfr.]		
10)	Is electrode blotted dry between calibration and measurement? [Mfr.]		
11)	Are the standard and samples left un-stirred during measurement? [Mfr.]		
12)	Is a standard curve developed using a reagent blank and three standard solutions containing 0.2, 1.0, 5.0 mL 0.00281 N potassium iodate/100 mL solution, respectively? [40 CFR Part 136.3, Table IB footnote 16]		
13)	If measuring below 0.2 ppm, was a blank used for correcting measurement? [Mfr.]		
14)	Is sample value read correctly? [Mfr.]		
15)	Are samples analyzed within 15 minutes of collection? [40 CFR Part 136]		

PROBLEMS: